

In the Claims:

1-18. (Canceled)

19. (Currently Amended) A method for booting a system, the system featuring a processor for executing boot code, the method comprising:

providing a flash-based unit in the system for storing the boot code to be executed, said flash-based unit comprising a flash memory of a restricted type, being characterized in that code cannot be directly executed from said flash memory, and a volatile memory component for receiving a portion of the boot code to be executed, said portion of the boot code being for basic initialization of hardware of the system;

sending a busy signal to said processor;

transferring said portion of the boot code to said volatile memory component;

removing said busy signal; and

executing said portion of the boot code by said processor to boot the system.

20-21. (Canceled)

22. (Currently Amended) A method for booting a system, the system featuring a processor for executing boot code, the method comprising:

providing a flash-based unit in the system for storing the boot code to be executed, said flash-based unit comprising a flash memory of a restricted type, being characterized in that code cannot be directly executed from said flash memory, and a volatile memory component for receiving a portion of the boot code to be executed;

transferring a first portion of the boot code to said volatile memory component, said first portion of the boot code being for basic initialization of

hardware of the system and containing a command for copying a second portion of the boot code; and

executing said first portion of the boot code by said processor to boot the system.

23. (Original) The method of claim 22, further comprising the step of:
transferring said second portion of the boot code to said volatile memory component for booting the system.

24. (Currently Amended) A flash-based unit for providing boot code to be executed by an external processor, comprising:

- (a) a flash memory for storing the boot code to be executed, said flash memory being of a type such that the boot code cannot be executed in place from said flash memory; and
- (b) a volatile memory component for receiving at least a portion of the boot code to be executed, such that at least said portion of the boot code is executed by the external processor from said volatile memory component, said at least portion of the boot code being only sufficient for basic initialization of hardware of a system that includes the external processor, said volatile memory component being only large enough to store said at least portion of the boot code.

25. (Currently Amended) A system for executing boot code from a restricted non-volatile memory, the restricted non-volatile memory being

characterized in that code cannot be directly executed from the restricted non-volatile memory, the system comprising:

- (a) a central processing unit (CPU) for executing the boot code; and
- (b) a volatile memory component in direct communication with the restricted non-volatile memory for holding at least a portion of the boot code to be executed, said at least portion of the boot code being transferred from the restricted non-volatile memory, such that said CPU executes said at least portion of the boot code from said volatile memory component, said at least portion of the boot code being only sufficient for basic initialization of hardware of the system, said volatile memory component being only large enough to store said at least portion of the boot code.

26. (Currently Amended) A system for executing boot code, comprising:

- (a) a flash-based unit for storing the boot code to be executed, said flash-based unit comprising a flash memory of a restricted type, being characterized in that the boot code cannot be directly executed from said flash memory, and a volatile memory component for receiving a portion of the boot code to be executed, said portion of the boot code being only sufficient for basic initialization of hardware of the system, said volatile memory component being only large enough to store said at least portion of the boot code; and
- (b) a processor for executing the boot code, said processor receiving at least said portion of the boot code from said volatile memory component;

wherein an additional memory component is not required for executing the boot code by said processor.

27. (Currently Amended) A flash-based unit for providing boot code to be executed by an external processor, consisting essentially of:

- (a) a flash memory for storing the boot code to be executed, said flash memory being of a type such that the boot code cannot be executed in place from said flash memory, and
- (b) a volatile memory component for receiving at least a portion of the boot code to be executed, such that at least said portion of the boot code is executed by the external processor from said volatile memory component, said at least portion of the boot code being only sufficient for basic initialization of hardware of a system that includes the external processor, said volatile memory component being only large enough to store said at least portion of the boot code.

28-35. (Canceled)

36. (Original) The method of claim 19, wherein said flash-based unit is separate from the processor.

37. (Original) The method of claim 19, wherein said busy signal is sent in response to a power-on signal.

38. (New) A method for booting a system, the system featuring a processor for executing boot code, the method comprising:

providing a flash-based unit in the system for storing the boot code to be executed, said flash-based unit comprising a flash memory of a restricted type, being characterized in that code cannot be directly executed from said flash memory, and a volatile memory component for receiving a portion of the boot code to be executed;

transferring a first portion of the boot code to said volatile memory component, using a logic separate from the processor, said first portion of the boot code being for basic initialization of the system and containing a command for copying a second portion of the boot code; and

executing said first portion of the boot code by said processor to boot the system.